

REMARKS/ARGUMENTS

Claims 15-24 are pending in the Application. Claim 15 has been amended to include the limitation of Claim 16. Claims 16, 17, 20 and 21 have been cancelled. The amendments are supported in the cancelled claims.

Rejections Under 35 U.S.C. § 103(a)

Claims 15-24 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,319,594 to Suzuki et al. (hereinafter "Suzuki"). The Examiner alleges that Suzuki discloses a film that includes a transparent conductive layer comprising conductive fine particles such as zinc oxide embedded in a curing resin such as an organosilicon compound. Applicants respectfully disagree.

The present invention is directed to a plastic article, which is transparent and consists of a plastic substrate, optionally a coupling layer, at least one zinc oxide coating, wherein the coating consists essentially of zinc oxide nanoparticles which have a primary particle size of from 1 to 30 nm and which are embedded in an organosilane as a binder resin, and one abrasion resistant outer coating.

Suzuki discloses a film that includes a transparent substrate film; and, provided on the transparent substrate film in the following order, a transparent conductive layer, a hardcoat layer, and a low refractive layer, the low refractive layer having a lower refractive index than the hardcoat. The transparent conductive layer is formed from a conductive coating liquid containing conductive fine particles and a reactive curing resin. The conductive fine particles used in the formation of the transparent conductive layer include fine particles of antimony-doped indium-tin oxide ("ATO"), and indium-tin oxide (ITO). Metals and metal oxides used in the formation of the conductive thin film by sputtering or the like include, gold, nickel, ATO, ITO, and zinc oxide/aluminum oxide.

The Examiner asserts that Suzuki discloses using zinc oxide as the conductive fine particles, but this is a misreading and misapplication of Suzuki, because Suzuki clearly discloses and requires the use of zinc oxide/aluminum oxide.

It is well known in the art that ZnO/Al²O³ materials are a composite that contain both zinc oxide and aluminium oxide. The Examiner, without any suggestion, motivation or disclosure in Suzuki has removed the aluminium oxide portion of the compound disclosed by Suzuki in order to substantiate his rejection.

This is hindsight reconstruction, where the Examiner uses the present invention's use of zinc oxide as motivation to modify a prior art reference.

Further, Claim 15 uses the closed end language "consists of" which forecloses adding additional elements as the Examiner has.

As Suzuki does not disclose or provide any disclosure or motivation for using a zinc oxide coating consisting essentially of zinc oxide nanoparticles in the film, as presently claimed, it does not render the claims obvious. Therefore, the rejection of claims 15-24 under 35 U.S.C. § 103(a) should be withdrawn.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being obvious over EP 0 763 581 A2 to Abe et al. (hereinafter "Abe").


Abe does not disclose or in any way suggest films having an abrasion resistant outer coating containing sol-gel materials. Therefore the claims are not obvious over Abe and the rejection of Claim 15 under 35 U.S.C. § 103(a) should be withdrawn.

CONCLUSION

In view of the above amendments and remarks, reconsideration of the rejections and allowance of Claims 15, 18, 19, and 22-24 are respectfully requested.

Respectfully submitted,

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